

MS-5. Ceramics and inorganic materials

8 September, 17:00 - 19:00 / 9 September, 16:30 - 18:30

MS-5-P-1520

TEM investigation of wound highly porous oxide (WHIPOX) ceramic matrix composites (CMC)

Presenting author: **Müller M. G.**

Authors: Müller M. G., Mayer J., Eils N.

MS-5-P-1528

TEM/STEM investigation of Ni/YSZ boundary in solid oxide fuel cell

Presenting author: **Liu S. S.**

Authors: Liu S. S., Matsumura S., , Koyama M.,

MS-5-P-1576

Element/Site-Selective Local Ligand Analysis using High-Angular Resolution Electron Channeled Fluorescent Spectroscopy

Presenting author: **Muto S.**

Authors: MUTO S., Ohtsuka M., ICHIKAWA T., TATSUMI K., BOSMAN M., YAMANE H.

MS-5-P-1599

Preparation and Characterization of Mixed CeO₂-Nb₂O₅-Bi₂O₃ Nanoparticles

Presenting author: **Moore K. L.**

Authors: Moore K. L., Jefferson D. A.

MS-5-P-1617

Structural examination of bioactive, low cost and environmental friendly biogenic hydroxyapatite

Presenting author: **Balazsi K.**

Authors: Balazsi K., Tapasztó O., Lee S. W., Kim S. G., Balazsi C.,

MS-5-P-1638

TEM on LiNi_{0.5}Mn_{1.5}O₄ Thin-Film Cathodes on Gold-Coated Stainless Steel Substrates

Presenting author: **Gries K. I.**

Authors: Gries K. I., Gellert M., Ott A., Zakel J., Spannenberger S., Yada C., Rosciano F., Roling B., Volz K.

MS-5-P-1662

A Rhombic Dodecahedral Honeycomb Structure with Cation Vacancy Ordering in a γ -Ga₂O₃ Crystal

Presenting author: **Mitome M.**

Authors: Mitome M., Kohiki S., Nagai T., Kurashima K., Kimoto K., Bando Y.

MS-5-P-1753

High-precision chemical analysis and structural determination of functional oxides by STEM-EELS

Presenting author: **Kepaptsoglou D. M.**

Authors: Kepaptsoglou D. M., Azough F., Jackson S., Freer R., Ramasse Q. M.

MS-5-P-1788

Measurement of Piezoelectric Properties of BaTiO₃ Nanoparticle

Presenting author: **Kim S.**

Authors: Kim S., Kim G., Rhyim Y., Choi S.

MS-5-P-2035

Electron microscopy study of vitrified products containing chromium-rich tannery ash

Presenting author: **Karakostas T.**

Authors: Varitis S., Kavouras P., Kaimakamis G., Dimitrakopoulos G. P., Pavlidou E., Vourlias G., Komninou P., Karakostas T.

MS-5-P-2087

Grain boundary domain dynamics investigated by Transmission Electron Microscopy in modified BaTiO₃ displaying PTCR effect

Presenting author: **Holsgrove K. M.**

Authors: Holsgrove K. M., Douglas A. M., Einsle J., Gregg J. M., Arredondo M.

MS-5-P-2110

STRUCTURE AND MICROSTRUCTURE STUDY OF HYDROXYAPATITE SYNTHESIZED BY CO-PRECIPIATION METHOD ASSISTED BY THREE DIFFERENT STIRRING MECHANISMS

Presenting author: **De León E C.**

Authors: De León E C., Vargas B N., Téllez J L., Reyes G J., Álvarez P M. A.

MS-5-P-2408

Microstructure evolution of NiO-YSZ cermet sintering process by HRSEM

Presenting author: **Liu S. S.**

Authors: Liu S. S., Matsumura S., Koyama M.,

MS-5-P-2515

Transmission electron microscopy investigation of transparent α -alumina

Presenting author: **Nabiei F.**

Authors: Nabiei F., Tewari A., Cantoni M., Bowen P., Hebert C.

MS-5-P-2639

The modulated structure of Fe₂O₃(ZnO)₇ studied by HAADF-STEM

Presenting author: **Mader W.**

Authors: Eichhorn S., Schmid H. K., Mader W.

MS-5-P-2683

Structure determination of an iron perovskite lanthanum material using precession and convergent beam electron diffraction

Presenting author: **Martinez-Amesti A.**

Authors: Martinez-Amesti A., Ecija A., Jacob D., Vidal K., Nó M. L., Arriortua M. I.

MS-5-P-2811

Accelerated decomposition of Y₂O₃-doped ZrO₂ by dissolved Ni — Unveiling the atomistic processes by in situ TEM

Presenting author: **Butz B.**

Authors: Butz B., Stark M., Michel S., Spiecker E.

MS-5-P-2837

Real structure of $(\text{Sb}_{1/3}\text{Zn}_{2/3})\text{GaO}_3(\text{ZnO})_3$ revealed by ED and HAADF-STEM

Presenting author: **Assenmacher W.**

Authors: Garling J., Hühne S. M., Schmid H., Assenmacher W., Mader W.

MS-5-P-2839

Synthesis of rare earths oxides from waste minerals

Presenting author: **Madigou V.**

Authors: MADIGOU V., PEREIRA DE SOUZA C., ARAB M., GAVARRI J. R., LEROUX C.

MS-5-P-3060

Characterization by aberration corrected STEM-EELS of YSZ epitaxial thin films

Presenting author: **Cabero M.**

Authors: Cabero M., Rivera Calzada A., Pennycook T. J., Varela M., Pennycook S. J., Leon C., Santamaría J.

MS-5-P-3068

DETERMINATION OF STRUCTURE AND CHEMISTRY OF LONG-PERSISTENCE STRONTIUM ALUMINATE PHOSPHOR COMPOUNDS IN ABERRATION-CORRECTED TEM/STEM

Presenting author: **Inan G.**

Authors: Inan G., Ceh M., Sturm S., Ow-Yang C. W.

MS-5-P-3155

Characterisation of thermally degraded polycrystalline diamond

Presenting author: **Westraadt J. E.**

Authors: Westraadt J. E., Neethling J. H., Sigalas I.

MS-5-P-3174

HRTEM studies of crystalline growth to unlock the formation mechanisms of titania nanodandelions

Presenting author: **Narrandes A.**

Authors: Narrandes A., Franklyn P. J.

MS-5-P-3185

The effect of precursor variation on the formation of TiO_2 synthesized by the resin-gel method

Presenting author: **Narrandes A.**

Authors: Narrandes A., Franklyn P. J.

MS-5-P-3207

Nanocharacterization and Electrical Properties of Grain Boundaries in Gd/Pr Doubly-Doped CeO_2

Presenting author: **Bowman J. W.**

Authors: Bowman J. W., Zhu J., Crozier A. P.

MS-5-P-3261

Fiber Optic Dielectric Nanoparticle Characterization by Atom Probe Tomography

Presenting author: **Ulfig R. M.**

Authors: Francois-Saint-Cyr H., Ulfig R. M., Martin I. Y., Blanc W., LeCoustumer P., Hombourger C., Neuville D., Larson D. J., Guillemier C.

MS-5-P-3290

Monitoring of Ti Atoms Pathway at Nano-Scale in Joined Ceramics by Electron Microscopy

Presenting author: **Tunckan O.**

Authors: Tunckan O., Yurdakul H., Turan S.

MS-5-P-3380

Effect of Film Thickness and Strain on Octahedral Tilt in Epitaxial LaCoO₃ Thin Films

Presenting author: **Jang J.**

Authors: Jang J., Mishra R., He Q., Qiao L., Biegalski M. D., Lupini A. R., Pantelides S. T., Borisevich A. Y.

MS-5-P-3418

Comparative microstructural evaluation of red ceramics incorporated with inorganic secondary materials

Presenting author: **Spiliotis X.**

Authors: Spiliotis X., Karayannis V., Koukouzas N., Ntampeglitis K., Papapolymerou G.

MS-5-P-3426

TEM studies on in-situ formation of SiC in AlN-Si-Al composites

Presenting author: **Kaya P.**

Authors: KAYA P., YURDAKUL H., TURAN S., KALEMTAS A., ARSLAN G., KARA F.

MS-5-P-3495

Influence of the drying on the characteristics of ZnO particles

Presenting author: **Silva J. B.**

Authors: Mohallem N. S., Silva J. B., Resende C. P., Santos W. M.

MS-5-P-5729

TEM-investigation of sulphur contamination on the SOFC material La_{0.6}Sr_{0.4}CoO₃

Presenting author: **Gspan C.**

Authors: Gspan C., Bucher E., Sitte W., Hofer F.

MS-5-P-5819

Mechanical behaviour of potassium niobate under compression between room temperature and 900°C

Presenting author: **Mark A. F.**

Authors: Mark A. F., Castillo-Rodriguez M., Sigle W., van Aken P. A.

MS-5-P-5861

Microstructure of Si₃N₄ with graphene multipatelets sintered with different sintering additives

Presenting author: **Kašiarová M.**

Authors: Kašiarová M., Michalková M., Dusza J., Šajgalík P.

MS-5-P-5947

**Influence of use of plastic as fuel in cement clinker production on phase distribution:
SEM as a QC-tool**

Presenting author: **Semsari Parapari S.**

Authors: Semsari Parapari S., Mokhtari P., Papila M., Gülgün M. A., Uysal Tüten P.

MS-5-P-6058

**Characterization of niobium carbides obtained via temperature programmed
synthesis assisted with metallic magnesium.**

Presenting author: **González G.**

Authors: Morgado-Vargas M., González G., Urbina de Navarro C., Betancourt P.